From: Gray, David

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**Subject:** Latest HH update

EPA has 198 personnel supporting the response efforts for Hurricane Harvey and have established a Unified Command with other state and federal partners, and are in the field conducting work. Working together, the U.S. Environmental Protection Agency and the Texas Commission on Environmental Quality continue to coordinate with local, state and federal officials to address the human health and environmental impacts of Hurricane Harvey and its aftermath, especially the water systems in the affected areas. The TCEQ has approximately 500 people assisting in response to this natural disaster.

As part of this coordination, a Unified Command was established between the EPA, the TCEQ, the General Land Office, and the U.S. Coast Guard to oversee all emergency response efforts. This Unified Command is supported by three operational branches in Corpus Christi, Houston, and Port Arthur. In addition to the EPA, the TCEQ, the GLO, and the USCG, multiple agencies and groups are supporting each of the operational branches, including the Texas National Guard, 6th Civil Support Team; the Arkansas National Guard, 61st Civil Support Team; the Oklahoma Task Force 1; and the Texas State Guard Engineering Group. Branch personnel are working to continuously monitor water and wastewater systems, as well as assess spills or discharges as a result of the storm.

As of Friday, Sept. 8, the following information is available:

Drinking Water: To date, about 2,238 drinking water systems have been affected by Harvey. Of those: 1,924 systems are fully operational, 161 have boil-water notices, and 52 are shut down. Both the EPA and the TCEQ are contacting remaining systems to gather updated information of their status. Assistance teams are in the field working directly with system operators to expedite getting systems back to operational status.

Wastewater and Sewage: Currently, 1,144 of approximately 1,219 wastewater treatment plants are fully operational and 40 are inoperable in the affected counties. The agencies are aware that releases of wastewater from sanitary sewers are occurring as a result of the historic flooding and are actively working to monitor facilities that have reported

spills. Additionally, the agencies are conducting outreach and providing technical guidance to all other wastewater facilities in flood-impacted areas. Assistance teams will continue to be deployed to work directly with system operators to expedite getting systems back to operational status.

Flood Water: Water quality sampling will be focused on industrial facilities and hazardous waste sites. Floodwaters contain many hazards, including bacteria and other contaminants. Precautions should be taken by anyone involved in cleanup activities or any others who may be exposed to flood waters. These precautions include heeding all warnings from local and state authorities regarding safety advisories. In addition to the drowning hazards of wading, swimming, or driving in swift floodwaters, these waters can carry large objects that are not always readily visible that can cause injuries to those in the water. Other potential hazards include downed power lines and possible injuries inflicted by animals displaced by the floodwaters.

Critical Water Infrastructure: The TCEQ has made contact with the owners of the 340 dams in the impacted areas. There are 15 dams that have reported some type of damage. There have been no reports of downstream damage or loss of life. The TCEQ will be meeting with affected dam owners in the next week.

## Additional EPA/TCEQ updates include:

• Superfund Sites: The EPA and the TCEQ continue to get updates about the status of specific sites from the parties responsible for ongoing cleanup of the sites. The TCEQ has completed the assessment of all 17 state Superfund sites in the affected area. There were no major issues noted. The TCEQ will continue to monitor sites to ensure no further action is needed in regards to the storm.

The EPA completed site assessments at all 43 Superfund sites affected by the storm. Of these sites, two (San Jacinto and U.S. Oil Recovery) require additional assessment efforts. Assessments of these sites will take several days to complete. The San Jacinto Waste Pits site has a temporary armored cap designed to prevent migration of hazardous material. The EPA remedial manager is onsite and overseeing the assessment. Crews continue to survey portions of the cap that are submerged. There are some areas where rock has been displaced and the liner is exposed. The potential responsible party has mobilized heavy equipment and is placing

rock on different places on the armored cap to repair the defensive surface. The liner is in place and functional so we don't have any indication that the underlying waste materials have been exposed. If we find a breach in the exposed liner, we direct the responsible party to collect samples to determine if any materials have been released. Also, the EPA has dive teams to survey the cap underwater if needed. Work to improve conditions after the storm has continued at the U.S. Oil Recovery site to address flood water from the storm. Nine vacuum truckloads of approximately 45,000 gallons of storm water were removed and shipped offsite for disposal. No sheen or odor was observed in the overflowing water, and an additional tank is being used to maintain freeboard to keep water on-site. The EPA has directed potential responsible parties or has independently started collecting samples at the 43 Superfund sites to further confirm any impacts from the storm. The total number of Superfund sites increased from 41 to 43 with the addition of Rapides Parish, Louisiana and Waller County, Texas as disaster declared areas. Sampling efforts of all 43 sites is expected to be completed early next week with sample results will be available soon.

- Air Quality Monitoring: One of the many preparations for Hurricane Harvey included the EPA, the TCEQ, and other monitoring entities temporarily shutting down several air monitoring stations from the greater Houston, Corpus Christi, and Beaumont areas to protect valuable equipment from storm damage. Since then, state and local authorities have been working to get the systems up and running again as soon as possible. As of Thursday, Sept. 7, the TCEQ's air monitoring network is operational 100 percent in Corpus Christi, 88 percent in Houston, and 71 percent in Beaumont. The network is expected to be fully operational again by next week. Of the available air monitoring data collected from Aug. 24-Sept. 7 all measured concentrations were well below levels of health concern. Monitors are showing that air quality at this time is not concerning, and residents should not be concerned about air quality issues related to the effects of the storm the neighborhood in southeast Houston and press release and data reports are available online at https://www.epa.gov/newsreleases/epatceqcity-houston-harvey-update
- Refineries/Fuel Waivers: In addition to gasoline waivers for 38 states and D.C. and diesel waivers for Texas, the EPA signed three No Action Assurance letters on Sept. 1 to help address fuel shortages. NAA will help expedite the distribution of existing gasoline supplies to both Texas and Louisiana, while the refineries work to re-start and resume normal operations. The diesel waivers and NAA letters are effective until Sept. 15

and should allow for the distribution of fuel to consumers in Texas. The EPA recently reissued the gasoline waivers for the maximum time allowed under the Clean Air Act through Sept. 26, and the TCEQ will work with the EPA to extend these waivers through Oct. 1. The TCEQ is currently evaluating whether the NAA letters and diesel waivers need to be reissued and has discussed possible reissuance with the EPA.

• Arkema Plant Fire Update: The U.S. Environmental Protection Agency (EPA) has completed its response support to the Crosby Volunteer Fire Department and the Harris County Fire Marshal's Office for the catastrophic event at Arkema. A copy of EPA press release and summary information is available at https://www.epa.gov/newsreleases/arkema-update.